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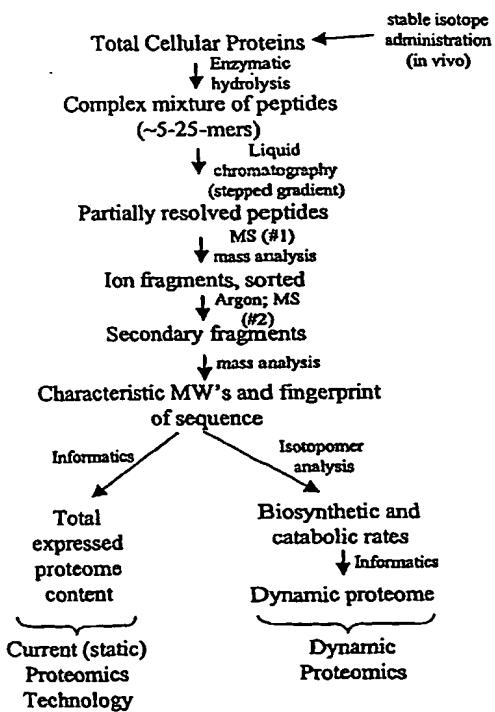
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(54) Title: METHOD FOR AUTOMATED, LARGE-SCALE MEASUREMENT OF THE MOLECULAR FLUX RATES OF THE PROTEOME OR THE ORGANEOME USING MASS SPECTROMETRY



(57) **Abstract:** Disclosed here is a method for measuring the kinetics (i.e., the molecular flux rates - synthesis and breakdown or removal rates) of a plurality of proteins or organic metabolites in living systems. The methods may be accomplished in a high-throughput, large-scale automated manner, by using existing mass spectrometric profiling techniques and art well known in the fields of static proteomics and static organeomics, without the need for additional biochemical preparative steps or analytic/instrumental devices.



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